

P192 (continued)

Background (Background, Rationale, Prior Research, and/or Theory): African American (AA) adults experience high rates of obesity, cardiovascular disease, and diabetes. Studies suggest that environmental barriers, perceived social support and self-efficacy to engage in healthy eating are associated with diet quality. Few studies have examined these factors among AA adults.

Objective: To examine diet quality among African American adults and its association with social support, self-efficacy and barriers to healthy eating.

Study Design, Setting, Participants, Intervention: A convenience sample was recruited from churches, through the newspaper and snowballing techniques to complete in-person surveys.

Outcome Measures and Analysis: Mean Healthy Eating Index (HEI), social support, self-efficacy, and barriers to healthy eating were assessed with measures derived from the National Health Interview Survey and the Behavioral Risk Factor Surveillance System. Linear regressions were employed to examine the association between variables of interest.

Results: A total of 105 AA (70.4% female, mean age = 36.88 (SD = 16.48)) participated. Self-efficacy and social support towards healthy eating were high while barriers to engagement in healthy eating and HEI scores were low. When social support, self-efficacy, and barriers to healthy eating were in the same model predicting HEI scores, only barriers was statistically significant. There was a negative significant association between barriers and HEI score ($B = -3.65$, $t = -2.20$, $P = .03$).

Conclusions and Implications: Low barriers to healthy eating, high social support and high self-efficacy for healthy eating did not result in high HEI scores, indicating a possible disconnect between perception and ability to execute health eating behavior. Although previous research shows social support, self-efficacy and barriers to healthy eating are important factors impacting diet quality, in the current sample, barriers proved to be the most important factor with regards to engaging in healthy eating among this sample.

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P193 DASH Diet Compliance in Middle-Aged and Elderly Adults With Elevated or High Blood Pressure

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Background (Background, Rationale, Prior Research, and/or Theory): Several studies have shown the cardiovascular health benefits of the Dietary Approaches to Stop Hypertension (DASH). However, individuals with

hypertension are less likely to follow DASH than individuals without hypertension.

Objective: Compare diet quality by sex and age groups among participants receiving two separate education sessions: a 30-minute education on DASH and a following 20-minute education on ASA24™ and DASH at baseline by a registered dietitian.

Study Design, Setting, Participants, Intervention: Researchers are blinded to the groups in this phase 3 randomized controlled trial of exercise. Participants undergo exercise training three times per week for one year consisting of aerobic exercise, resistance exercise, a combination of both, or delayed exercise (control). Three 24-hour dietary recalls per month are collected from participants using ASA24™. One hundred individuals met the criteria of 3 baseline diet recalls and three recent diet recalls during a 3-month follow-up. Participants had elevated or stage I hypertension, with a mean age of 53 years old, an average BMI of 32 kg/m², and not on blood pressure medication. Seventy-one percent of these individuals completed 80% or more of their diet recalls within 3 months.

Outcome Measures and Analysis: Diet quality was assessed by the DASH score. T-tests and Least Square Means (LSM) were used to compare scores between sexes and ages groups. A significance level of .05 was used for statistical tests.

Results: Men's DASH score at baseline was higher than women's (\bar{x} females = 2.4, \bar{x} males = 3.1; $P = .04$) and ≥ 56 years old had the highest DASH score compared to the 35–55 year olds at baseline ($P < .0001$). The 35–45 year olds had the highest DASH score ($\bar{x} = 3.06$; $P \leq 0.0001$) compared to the ≥ 46 year olds ($\bar{x} = 2.6$) at month three. At three months, women had a significant change in the DASH score (women = +0.24, men = -0.34; $P \leq 0.0001$).

Conclusions and Implications: Women's diet quality increased during the first three months of the study, whereas men's diet quality worsened.

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P194 Data-Driven Psychosocial Phenotyping for Precision Behavioral Nutrition

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Background (Background, Rationale, Prior Research, and/or Theory): People respond differently to behavior change interventions; therefore, behavioral nutrition interventions often have small effect sizes. Precision Behavioral Nutrition aims to leverage information about individuals to make these interventions more effective via personalization. Psychosocial phenotyping describes variability in psychological and social characteristics in a population, identifying salient mediators of behavior change. Previously, we used psychosocial phenotyping to qualitatively explain results of a behavioral nutrition

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